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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,803	11/29/2001	Kazuhiro Murakami	011608	9181

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EXAMINER	
MAYO III, WILLIAM H	

ART UNIT	PAPER NUMBER
2831	

DATE MAILED: 10/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

RF

Office Action Summary	Application No.	Applicant(s)	
	09/995,803	MURAKAMI ET AL.	
	Examiner	Art Unit	
	William H. Mayo III	2831	

-- The MAILING DATE of this communication app ars on th cover sh et with the corr spondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 June 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Takuya et al (JP Pat Num 05-121139, herein referred to as Takuya). Takuya discloses a cable enrolling conductive thin film (Figs 15-22) that is ultrasonic welded to another conductor (abstract). Specifically, with respect to claim 4, Takuya discloses a conductive thin film (210, Fig 16) having a conductor layer (211), a first insulating layer (212) laminated on a front face of the conductor layer (211), and a second insulating layer (214) laminated on a rear face of the conductor layer (211), and an electrical cable (E) having an electrically conductive wire (E1) and an insulating sheath (denoted as C) covering the core wire (E1), wherein the conductor layer (211) of the conductive thin film (210) and the core wire (E1) of the electrical cable (E) are welded to each other (Page 8 of translation pages, paragraph 31), wherein the conductive thin film (210) is capable of enrolling the electrical cable (E) to electrically shield the electrical cable (E). With respect to claim 5, Takuya discloses a conductive thin film (210, Fig 16) having a conductor layer (211), a first insulating layer (212) laminated on a front face of the conductor layer (211), and a second insulating layer (214) laminated on a rear face of the conductor layer (211), and

a plurality of electrical cables (E, to connect to each conductive layers 211) may be disposed parallel on the conductive thin films (211), wherein each electrical cable (E) has an electrically conductive wire (E1) and an insulating sheath (denoted as C) covering the core wire (E1), wherein the conductor layer (211) of the conductive thin film (210) and the core wire (E1) of the electrical cable (E) are welded to each other (Page 8 of translation pages, paragraph 31), wherein the conductive thin film (210) is capable of enrolling the electrical cable (E) to electrically shield the electrical cable (E). With respect to claim 6, Takuya discloses that the bonded conductive thin film (10) and the electrical cable (E) are utilized in car wiring or electrical machinery, thereby inherently being grounded (Page 11, under Technical Field). With respect to claim 7, Takuya discloses a method of producing a conductive thin sheet (10, Fig 15) comprising the steps of laying the electrical cable (E) on first insulation layer (12), and welding the electrical cable (E) on the first insulation layer (12) by ultrasonic welding so that the conductor layer (11) of the conductive thin film is connected to the core wire (E1) of the electrical cable (E, Page 8 of translation pages, paragraph 33).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3 and 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takuya et al (JP Pat Num 05-121139) in view of Kato et al (Pat Num 5,584,122, herein referred to as Kato). Takuya discloses a cable enrolling conductive thin film (Figs 15-22) that is ultrasonic welded to another conductor (abstract) as disclosed above with reference to claim 1. Specifically, with respect to claim 1, Takuya discloses a conductive thin film (210, Fig 16) having a conductor layer (211), a first insulating layer (212) laminated on a front face of the conductor layer (211), and a second insulating layer (214) laminated on a rear face of the conductor layer (211), and an electrical cable (E) having an electrically conductive wire (E1) and an insulating sheath (denoted as C) covering the core wire (E1), wherein the conductor layer (211) of the conductive thin film (210) and the core wire (E1) of the electrical cable (E) are welded to each other (Page 8 of translation pages, paragraph 31). With respect to claim 2, Takuya discloses that the conductive thin film (210) has a first and second insulating layer (212 & 214) and an electrical cable (E) having a sheath (C). With respect to claim

3, Takuya discloses that the sheath (C) of the electrical cable (E) has a round section (Fig 16). With respect to claim 6, Takuya discloses that the bonded conductive thin film (10) and the electrical cable (E) are utilized in car wiring or electrical machinery, thereby inherently being grounded (Page 11, under Technical Field). With respect to claim 7, Takuya discloses a method of producing a conductive thin sheet (10, Fig 15) comprising the steps of laying the electrical cable (E) on first insulation layer (12), and welding the electrical cable (E) on the first insulation layer (12) by ultrasonic welding so that the conductor layer (11) of the conductive thin film is connected to the core wire (E1) of the electrical cable (E, Page 8 of translation pages, paragraph 33). With respect to claim 8, Takuya discloses a method of producing a conductive thin sheet (10, Fig 15) comprising the steps of laying the electrical cable (E) on first insulation layer (12), and welding the electrical cable (E) on the first insulation layer (12), by ultrasonic welding so that the conductor layer (11) of the conductive thin film is connected to the core wire (E1) of the electrical cable (E, Page 8 of translation pages, paragraph 33). With respect to claim 9, Takuya discloses a method wherein during the step of ultrasonic welding (Fig 17), wherein a horn tip (P1) is opposed to the electrical cable (E) and the anvil (A1) is opposed to the other first and second insulating layers (12 & 14) of the conductive thin film (10). With respect to claim 10, Takuya discloses a method wherein during the step of ultrasonic welding (Fig 17), a horn tip (P) is opposed to the electrical cable (E) and the anvil (A) is opposed to the second insulating layer (14). With respect to claim 11, Takuya discloses a method wherein during the step of ultrasonic welding (Fig 17), the horn tip (P1) and the anvil tip (A1) are moved to come close to each other (Page 8,

paragraph 33). With respect to claim 12, Takuya discloses a method wherein during the step of ultrasonic welding (Fig 17), a horn tip (P) contacts the sheath (C) of the electrical cable (E) and the anvil (A) contacts the second insulating layer (14) of the sheet (10).

However, Takuya doesn't necessarily disclose the welding being done such that the core wire of the electrical cable is not exposed externally (claim 1), nor the first and second insulating layers being welded to the sheath of the electrical cable (claim 2), nor the method producing the cable wherein the first and second insulating layers being welded to the sheath of the electrical cable (claim 8).

Kato teaches connection method (Figs 17-19) for connecting covered wires to another member by ultrasonic welding, wherein sufficient insulation is kept for the connection portion thereby simplifying the connection work and improving the mechanical strength of the connection portion (Col 3, lines 55-62). Specifically, with respect to claim 1, Kato teaches a conductive thin film (75, Fig 17) and a electrical cable (W1), wherein the ultrasonic welding is done such that the core wire (1) of the electrical cable (W1) is not exposed externally (Fig 17, Col 21, lines 45-51). With respect to claims 2 & 8, Kato teaches a conductive thin film (75, Fig 17) having a conductor layer (1), and an insulating layer (73) laminated on a front face of the conductor layer (1) and the rear face of the conductor layer (1), and an electrical cable (W1) having an electrically conductive wire (1') and an insulating sheath (3) covering the core wire (1'), wherein the conductor layer (1) of the conductive thin film (75) and the core wire (1') of the electrical cable (W1) are ultrasonic welded to each other, wherein the insulating

layer (73) of the thin film (75) is welded to the sheath (3) of the electrical cable (W1, Col 21, lines 35-66).

With respect to claims 1-2 & 8, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the connection portion of Takuya to comprise the insulating layers being welded to the sheath of the electrical cable as taught by Kato because Kato teaches that such a configuration provides a connection structure that simplifies the connection work and improves the mechanical strength of the connection portion (Col 3, lines 55-62).

Response to Arguments

6. Applicant's arguments filed June 6, 2003 have been fully considered but they are not persuasive. Specifically, the applicant argues the following:

A) Takuya doesn't disclose a conductive thin film sheet that is used for enrolling one or a plurality of electrical cables and therefore doesn't teach or suggest all the features recited in the present claimed invention.

B) Takuya doesn't teach or suggest welding of the conductor layer and the core wire of the electrical cable that doesn't externally expose the core wire.

With respect to argument A, the examiner respectfully traverses. The examiner would like to point out that the recitation that "the conductive thin film can enroll the electrical cable to electrical shield the electrical cable" suggest that the conductive thin film is capable of enrolling since the term "can enroll" doesn't positively recite

specifically that it has to perform the function of enrolling. The examiner would also like to point out that BAPI courts, have been consistent that intended use language doesn't contribute any patentable subject matter wherein the claimed structures are the same. Specifically, the courts have held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Therefore, since the conductive thin film is capable of enrolling an electrical cable, this claim limitation is met and therefore the rejection of claims 4 & 5 are proper and just.

With respect to argument B, the examiner respectfully submits that this argument is moot in view of the newly submitted rejection of amended claim 1.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

WHM III
October 23, 2003